

Remarks

The above Amendments and these Remarks are in reply to the Office Action mailed May 22, 2003. The fee for addition of new claims (or conversion of claims from dependent form to independent form) is included herewith.

Claims 1-90 were pending in the Application prior to the outstanding Office Action. In the Office Action, the Examiner rejected claims 1-9, 12, 20, 21, 24-28, 30, 31, 34-39, 47, 48, 52-56, and 61-90 and allowed claims 10, 11, 13-19, 22, 23, 29, 32, 33, 40-46, 49-51 and 57-60. The present Response cancels claims 52-56 and 61-90, amends claim 1, and adds new claims 91-98, leaving for the Examiner's present consideration claims 1-9, 12, 20, 21, 24-28, 30, 31, 34-39, 47, 48, and 91-98. Reconsideration of the rejections is requested.

I. SUMMARY OF INTERVIEW

As directed under MPEP §713, the Applicants include the following summary of a telephonic interview provided by Examiner Kim Chu on July 25, 2003 between Applicant Mr. Tom Rust, attorneys Mr. Sheldon R. Meyer and Mr. Michael L. Robbins, participant Dr. Gordon Knight and Examiner Kim Chu.

Claim 1 was discussed at length in light of prior art references Suzuki et al. (U.S. Pat. No. 5,929,438) and Koyanagi, et al. (U.S. Pat. No. 5,471,064). Further, U.S. Pat. Nos. 6,100,523; 6,335,522; 5,994,750; and 5,923,637 were discussed in light of proposed amendment. The substance of the interview is detailed in Examiner Kim Chu's Interview Summary. Further, the current amendment and addition of claims has been reviewed by Examiner Kim Chu prior to submission in this Response B.

The Applicant's principal argument is that the prior art references do not teach a platform substrate allowing for thermal stability of a memory apparatus over an operating temperature range. [For example, where both the media and platform comprise substrates that can expand at substantially the same rate over an operating temperature range, a memory apparatus can be thermally stable.] The interview concluded with

an agreement that the principal argument be incorporated in an amendment. As indicated above, the current amendment has been reviewed by Examiner Kim Chu prior to submission in this Response B.

II. REJECTION UNDER 35 U.S.C. §102(B) OVER KOYANAGI, ET AL. (U.S. PATENT 5,471,064)

Claims 52-55

The Examiner rejected claims 52-55 under 35 U.S.C. §102 as being anticipated by *Koyanagi*. The Applicant respectfully requests cancellation of claims 52-55.

The Examiner states that *Koyangi* teaches a method of making a media for storing data in the form of anomalies on a surface of the media having all of the steps as recited in claims 52-55. The Applicant respectfully disagrees for the reasons outlined in the previous response. However, in the interest of furthering prosecution, the Applicant respectfully requests cancellation of claims 52-56.

III. REJECTION UNDER 35 U.S.C. §102(B) OVER KOYANAGI,

Claims 61-76, 79, 80, 83-87, 89 and 90

The Examiner rejected claims 61-76, 79, 80, 83-87, 89 and 90 under 35 U.S.C. §102 as being anticipated by *Koyanagi*. The Applicant respectfully requests cancellation of claims 61-90.

IV. REJECTION UNDER 35 U.S.C. §103(A) OVER KOYANAGI IN VIEW OF SUZUKI, ET AL. (U.S. PATENT 5,929,438)

Claims 1-9, 12, 24, 25, 30, 31, 34-36, 38, 39, 47 and 48

The Examiner rejected claims 1-9, 12, 24, 25, 30, 31, 34-36, 38, 39, 47, and 48 under 35 U.S.C. §102(b) as unpatentable over *Koyanagi* in view of *Suzuki*. The Applicant respectfully traverses this rejection.

As indicated in the "Summary of Interview" above, the Applicant respectfully submits that Claim 1 is patentable over *Koyanagi* in view of *Suzuki*.

Since *Koyanagi* in view of *Suzuki* fails to teach or suggest all of the features of Claim 1, *Koyanagi* in view of *Suzuki* cannot render Claim 1 obvious under 35 U.S.C. §103(a). Dependent claims have at least the features of the independent claim from which they ultimately depend; therefore, *Koyanagi* in view of *Suzuki* cannot render dependent claims 2-9, 12, 24, 25, 30, 31, 34-36, 38 and 39 (which ultimately depend from Claim 1) obvious under 35 U.S.C. §102(b). Accordingly, the Applicant respectfully requests the withdrawal of this rejection.

The Examiner describes claims 47 and 48 as being "drawn to the method of using the corresponding apparatus claimed in claims 1 and 34-36. Therefore method claims 47 and 48 correspond to apparatus claims 1 and 34-36 and are rejected for the same reasons of anticipation (obviousness) as used above." For the reasons given above, the Applicant argues that claims 1 and 34-36 are patentable over the prior art. Accordingly, the Applicant respectfully requests the withdrawal of this rejection.

V. REJECTION UNDER 35 U.S.C. §103(A) OVER *KOYANAGI* IN VIEW OF *SUZUKI* FURTHER IN VIEW OF *ADDERTON*, ET AL. (U.S. PAT. NO. 6,196,061)

Claims 20 and 21

The Examiner rejected claims 20 and 21 under 35 U.S.C. §103(a) over *Koyanagi* in view *Suzuki* further in view of *Adderton*. The Applicant respectfully traverses this rejection.

In view of the remarks in Section IV above, the Applicant submits that *Koyanagi* in view of *Suzuki* fails to teach or suggest all of the features of claim 1, from which claims 20 and 21 ultimately depend. *Adderton* fails to remedy this deficiency.

In reference to Figure 1, *Adderton* discloses an AFM 10 including a sample 12 that is mounted on a sample mounting and positioning platform 14. See Col. 5, lines 50-54. Nowhere does *Adderton* teach or suggest a "platform having a second substrate comprising silicon dioxide" as recited in Claim 1. Since *Koyanagi* in view *Suzuki* in further view of *Adderton* fails to teach or suggest all of the features of claim

1, *Koyanagi* in view of *Suzuki* in further view of *Adderton* cannot render claim 20 obvious under 35 U.S.C. §103(a). Dependent claims have at least the features of the independent claim from which they ultimately depend; therefore, *Koyanagi* in view *Suzuki* in further view of *Adderton* cannot render claim 21 obvious under 35 U.S.C. §103(a). Accordingly, the Applicant respectfully requests the withdrawal of this rejection.

VI. REJECTION UNDER 35 U.S.C. §103(A) OVER *KOYANAGI* IN VIEW OF *SUZUKI* FURTHER IN VIEW OF *MAMIN*, ET AL. (U.S. PAT. NO. 5,804,710)

Claims 26 and 27

The Examiner rejected claims 26 and 27 under 35 U.S.C. §103(a) over *Koyanagi* in view *Suzuki* further in view of *Mamin*. The Applicant respectfully traverses this rejection.

In view of the remarks in Section IV above, the Applicant submits that *Koyanagi* in view of *Suzuki* fails to teach or suggest all of the features of claim 1, from which claims 26 and 27 ultimately depend. *Mamin* fails to remedy this deficiency. Figure 5 of *Mamin* shows an AFM having a cantilever connected to a large support. Nowhere does *Mamin* disclose a "platform comprising silicon dioxide" as recited in claim 1.

Since *Koyanagi* in view of *Mamin* fails to teach or suggest all of the features of claims 26 and 27, *Koyanagi* in view of *Mamin* cannot render claims 26 and 27 obvious under 35 U.S.C. §103(a). Accordingly, the Applicant respectfully requests the withdrawal of this rejection.

VII. REJECTION UNDER 35 U.S.C. §103(A) OVER *KOYANAGI* IN VIEW OF *SUZUKI* FURTHER IN VIEW OF *MIYAZAKI*, ET AL. (U.S. PAT. NO. 5,929,438)

Claim 28

The Examiner rejected claim 28 under 35 U.S.C. §103(a) over *Koyanagi* in view *Suzuki* further in view of *Miyazaki*. The Applicant respectfully traverses this rejection.

In view of the remarks in Section IV above, the Applicant submits that *Koyanagi* in view of *Suzuki* fails to teach or suggest all of the features of claim 1, from which claim 28 ultimately depends. *Miyazaki* fails to remedy this deficiency. Referring to Figure 16, *Miyazaki* discloses "[c]antilever units 131, 132, and 133

are formed on a silicon substrate 140." See column 19, lines 40-42. Nowhere does *Miyazaki* disclose a "platform comprising silicon dioxide" as recited in claim 1.

Since *Koyanagi* in view of *Suzuki* in further view of *Miyazaki* fails to teach or suggest all of the features of claim 28, *Koyanagi* in view of *Miyazaki* cannot render claim 28 obvious under 35 U.S.C. §103(a). Accordingly, the Applicant respectfully requests the withdrawal of this rejection.

VIII. REJECTION UNDER 35 U.S.C. §103(A) OVER *KOYANAGI* IN VIEW OF *SUZUKI* FURTHER IN VIEW OF *TANAKA* (U.S. PAT. NO. 5,808,973)

Claim 37

The Examiner rejected claim 37 under 35 U.S.C. §103(a) over *Koyanagi* in view *Suzuki* further in view of *Tanaka*. The Applicant respectfully traverses this rejection.

In view of the remarks in Section IV above, the Applicant submits that *Koyanagi* in view of *Suzuki* fails to teach or suggest all of the features of claim 1, from which claim 37 ultimately depends. *Tanaka* fails to remedy this deficiency. Referring to Figure 2, *Tanaka* discloses a "a needle-like ceramic head arm 3" on which a magnetic head is connected. See column 5, lines 38-39. Nowhere does *Tanaka* disclose "a moveable platform comprising silicon dioxide" as recited in claim 1.

Since *Koyanagi* in view of *Suzuki* in further view of *Tanaka* fails to teach or suggest all of the features of claim 37, *Koyanagi* in view of *Suzuki* in further view of *Tanaka* cannot render claim 37 obvious under 35 U.S.C. §103(a). Accordingly, the Applicant respectfully requests the withdrawal of this rejection.

IX. REJECTION UNDER 35 U.S.C. §103(A) OVER *KOYANAGI* IN VIEW OF *YANG, ET. AL.* (U.S. PAT. NO. 6,001,519)

Claim 56

The Examiner rejected claim 56 under 35 U.S.C. §103(a) over *Koyanagi* in view of *Yang*. The Applicant respectfully requests cancellation of claim 56.

The Examiner states that *Koyangi* teaches a method of making a media for storing data in the form of anomalies on a surface of the media having all of the steps as recited in claims 52-55 (from which claim 56 depends). The Applicant respectfully disagrees for the reasons outlined in the previous response and section I. However, in the interest of furthering prosecution, the Applicant respectfully requests cancellation of claim 56.

X. REJECTION UNDER 35 U.S.C. §103(A) OVER *KOYANAGI* IN VIEW OF *ADDERTON* OR *MAMIN* OR *MIYAZAKI*, OR *TANAKA*

Claims 77, 78, 81, 82 and 88

The Examiner rejected claims 77 and 78 under 35 U.S.C. §103(a) over *Koyanagi* in view of *Adderton*, claim 81 under 35 U.S.C. §103(a) over *Koyanagi* in view of *Mamin*, claim 82 under 35 U.S.C. §103(a) over *Koyanagi* in view of *Miyazaki*, and claim 88 under 35 U.S.C. §103(a) over *Koyanagi* in view of *Tanaka*. The Applicant respectfully requests cancellation of claims 77, 78, 81, 82 and 88.

XI. ALLOWABLE SUBJECT MATTER

Claims 10, 11, 13-19, 22, 23, 29, 32, 33, 40-46, 49-51 and 57-60

Applicant appreciates the indication that claims 10, 11, 13-19, 22, 23, 29, 32, 33, 40-46, 49-51 and 57-60 are allowed..

XII. ADDITIONAL CLAIMS

Claims 91-98

In light of the comments in Section III above, as well as the "Summary of Interview", the newly added claims are, it is submitted, allowable over the cited art. Claims 91-95 were submitted for review to the Examiner, and it was indicated that the claims complied with the substance of the interview. (Note: Claims 94 and 95 were submitted for review to the Examiner as claims "claims 92.5 and 93.5"). Claims 96-98 are additional claims that, it is submitted, comply with the substance of the interview.

XIII. CONCLUSIONS

In view of the above Remarks, reconsideration of claims 1-9, 12, 20, 21, 24-28, 30, 31, 34-39, 47 and 48 is requested, as well as consideration of new claims 91-98. It is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and a Notice of Allowance is requested. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: 8/22/03 (originally submitted 8/18)

By: _____

Michael L. Robbins
Reg. No. 54,774

FLIESLER DUBB MEYER & LOVEJOY LLP
Four Embarcadero Center, Fourth Floor
San Francisco, California 94111-4156
Telephone: (415) 362-3800

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